

IN THE CLAIMS:

These claims will replace all prior versions of claims in the present application.

Cancel claims 1-20. Kindly add the following new claims.

21. (New) A method of manufacturing at least one device defining a volume for retaining a fluid or a sensitive material that is capable of changing its physical properties, particularly its optical properties, via the application of a voltage, or its electrical properties via stress or radiation, said device including at least a first front substrate and at least a second back substrate maintained at a constant distance from each other, these two substrates being joined by a sealing joint which defines the volume for retaining the sensitive medium or fluid,

wherein said method includes the steps of:

- structuring at least one wall, which defines via its inner lateral face the volume for retaining the sensitive medium or fluid, on one of the substrates;
- joining the second substrate to the first substrate;
- introducing a sealing material capable of flowing into the gap defined by the outer lateral face of the wall and the two superposed substrates until at least a part of the volume of said gap is occupied by the sealing material, and
- solidifying the sealing material so that the latter forms the sealing frame.

22. (New) The method according to claim 21, wherein it includes the steps of:

- structuring, on one of the substrates, at least one filling channel defined by two walls, which extend at a distance from each other;
- joining the second substrate to the first substrate;
- introducing a sealing material capable of flowing into the filling channel until the entire volume of said filling channel is occupied, and
- solidifying the sealing material so that the latter forms the sealing joint.

23. (New) The method according to claim 22, wherein a batch of devices is made including two plates common to all of the devices and a network of sealed walls defining, for each device, a volume for retaining the sensitive medium or fluid as well as the filling channels which are to be filled with a sealing material to connect the two plates and to form the sealing joints of said devices.

24. (New) The method according to claim 23, wherein a first plurality of holes for filling the volumes with the fluid or sensitive material, and a second plurality of holes for feeding the sealing material, are made in one of the plates .

25. (New) The method according to claim 23, wherein one filling channel is shared by at least two adjacent devices.

26. (New) The method according to claim 24, wherein one filling channel is shared by at least two adjacent devices.

27. (New) The method according to claim 21, wherein the sealing material penetrates the gap by capillary action.

28. (New) The method according to claim 22, wherein the sealing material penetrates the filling channels by capillary action.

29. (New) The method according to claim 28, wherein it includes the additional steps of:

- creating a vacuum in the filling channel;
- causing the sealing material to enter said filling channel, and
- re-establishing the pressure outside the cell such that, via the pressure difference between the filling channel in which the vacuum prevails and the ambient pressure, the sealing material is driven to the bottom of the filling channel .

30. (New) The method according to claim 21, wherein a layer of photoresist material, which will subsequently be structured by photo-etching techniques to give it the shape of one or several walls, is deposited on one of the substrates.

31. (New) The method according to claim 30, wherein the photoresist layer is structured so as to form, not only the wall or walls, but also spacer structures for maintaining a constant distance between the two substrates of the cell.

32. (New) The method according to claim 21, wherein the wall or walls are structured by a selective technique for depositing the sealing material.

33. (New) The method according to claim 32, wherein the wall or walls are structured by screen printing.

34. (New) The method according to claim 32, wherein the wall or walls are structured by means of a seringe type dispenser.

35. (New) The method according to claim 21, wherein the sealing material is selected from the group formed by resins that can be polymerised by sensitisation using a light or by heating by raising the temperature of the ambient medium, by cyanoacrylate adhesives, by thermoplastic resins and by dual component adhesives whose components harden over time or via a rise in temperature when they are placed in each other's presence.

36. (New) A device defining a volume for confining a fluid or sensitive material capable of changing its physical properties, particularly its optical properties, via the application of a voltage, or its electrical properties, via stress or radiation, said device including at least a first front substrate and at least a second back substrate maintained at a constant distance from each other, these two substrates being joined by a sealing joint which defines the volume for retaining the sensitive medium or fluid, the sealing joint at least partly occupying the gap defined by said substrates and the outer lateral face of a wall structured on one of the substrates, said wall defining by its inner lateral face the volume for retaining the sensitive material or fluid, wherein the sealing joint is in contact on one side with the external face of the wall and on another side with the external atmosphere.

37. (New) A device defining a volume for confining a fluid or sensitive material capable of changing its physical properties, particularly its optical properties, via the application of a voltage, or its electrical properties, via stress or radiation, said device including at least a first front substrate and at least a second back substrate maintained at a constant distance from each other, these two substrates being joined by a sealing joint which defines the volume for retaining the sensitive medium or fluid, the sealing joint being formed by a filling channel defined by two walls which extend at a distance from each other over the

substrate on which said walls are formed, said filling channel being intended to be filled with a sealing material, wherein at least one hole communicating with the filling channel and for feeding the sealing material is made in one of the substrates or in the wall.

38. (New) The device according to claim 35, wherein it forms an electro-optical cell, particularly a liquid crystal cell, an electrochemical photovoltaic cell or a fluidic type micro-system.

39. (New) The device according to claim 36, wherein it forms an electro-optical cell, particularly a liquid crystal cell, an electrochemical photovoltaic cell or a fluidic type micro-system.

40. (New) The device according to claim 37, wherein it forms an electro-optical cell, particularly a liquid crystal cell, an electrochemical photovoltaic cell or a fluidic type micro-system.